

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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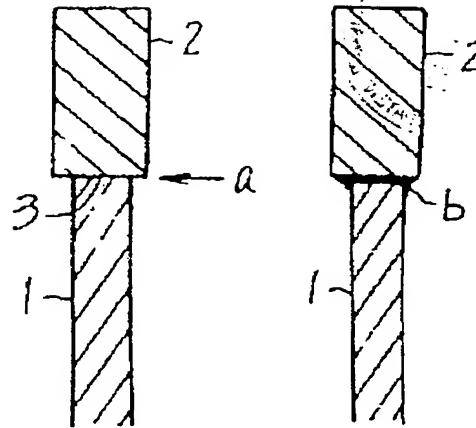
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APPLICANT : HITACHI KOKI CO LTD;

INVENTOR : ODAKA MAMORU;

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TITLE : PRODUCTION OF DIAMOND CORE BIT



ABSTRACT : PURPOSE: To improve joining strength and load resistance from the side by irradiating the joining face between a cylindrical body and arc-like diamond blade with laser beam or electron beam to form tapered fillet part.

CONSTITUTION: The tip of cylindrical body 1 is brought into contact with an arc-like diamond blade 2 and the joining face is continuously irradiated with laser beam or electron beam from the arrow (a) to melt whole the circumference in the vicinity of the joining face. Then the joining face is melted and solidified and tapered fillet (b) is formed in at least either one of outside or inside of diamond core bit to bond the body 1 to diamond blade 2.

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